

Kawneer

STORE FRONTS

1939

ARCHITECTURAL PORCELAIN ENAMEL

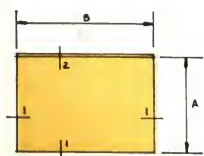


COLORFUL FACING FOR THE ENTIRE BUILDING

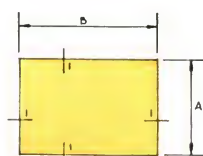
Kawneer Architectural Porcelain (Vitreous) Enamel Panel Construction offers a permanently attractive and colorful facing material for all types of store fronts and buildings. 27 standard colors include a variety of pastel shades, as well as the darker colors, and black and white—from which many harmonious color combinations can be selected. In addition, practically any color desired can be made to special order, and special designs, or letters reproduced.

With this modern facing material the designer is practically unlimited, since enameling steel can be fabricated in almost any shape or form desired.

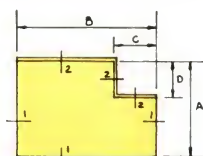
STANDARD SHAPES (BELOW)



TYPE R

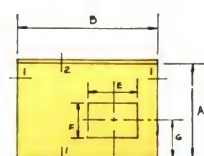


TYPE R-1

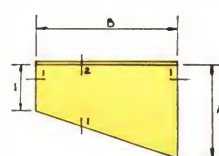


TYPE R-2

LEFT AND RIGHT RIGHT SHOWN



TYPE R-3



TYPE R-4

LEFT AND RIGHT RIGHT SHOWN

Important developments of the past few years have placed Kawneer Architectural Porcelain Enamel in the front rank of modern facing materials, for both exterior and interior use.

DESCRIPTION. Sturdy panel construction involves the fabrication of heavy 16-gauge extra flat enameling steel, with $\frac{3}{4}$ " flanges on all sides and welded at corners. These panels are then completely porcelain (vitreous) enameled on both sides—with 3 coats of desired color on face, fused under terrific heat each time. (1550°F.) Backing of $\frac{1}{2}$ " insulation board is then applied securely with water and heat proof cement—for strength, rigidity, insulation against sound and heat, and to prevent possible sweating.

The result is a panel construction of glass-fired steel, which can be produced in any shape or color—with a tough, inorganic non-porous surface, changeless color, and comparatively light weight. Each panel is individually suspended on concealed resilient clips.

USES. For exterior wall facing on masonry, wood or steel frame construction—for interior wall finish—as finishing material for ceilings, partitions, floors, etc.

ADVANTAGES:

Attractiveness—pleasing and modern in appearance, with sales-building life and color—narrow joints—concealed fastenings.

Durability—a tough surface and a strong light base—not easily damaged by fire or extreme temperatures—will not chip, break, scratch, flake, or crack or wear under ordinary use.

Wide range and permanence of color—25 standard colors plus black and white offer many interesting combinations and over 400 special colors and shades are available, meeting all requirements.

Low maintenance cost—non-porous and glasslike, porcelain enamel is easily cleaned.

Ease of erection and replacement—panels are light and strong, easily handled.

Safety. Comparatively light in weight, these panels may be installed to any height, since they are securely held by mechanical fastenings, and individually suspended.

High salvage value. Panels may easily be removed and installed in new location.

Adaptability. Unlike other facing materials, architectural porcelain enamel may be economically formed in any desired shape.

CONSTRUCTION. Heavy 16-gauge enameling steel, the best frits and oxides and advanced methods of fabrication and porcelain enameling are employed.

Flanges all around each panel provide greater rigidity and keylock the calking. Each panel flashes the one above to keep out water. (See details on page 3.) Individual suspension, on patented bronze spring clips, means a strong, resilient setting which is completely concealed. All flat panels are backed and strengthened by $\frac{1}{2}$ " insulation board securely attached with water and heat proof cement, and curved panels are also backed up by the best method under the condition applying. Narrow $\frac{1}{8}$ " space between panels.

ARCHITECTURAL PORCELAIN ENAMEL

STANDARD SIZES—16" x 16", 16" x 24", 20" x 20", 20" x 28", or any special sizes desired. Max. 2' x 3'.

STANDARD SHAPES. Shown in drawings below.

SPECIAL SHAPES. Design possibilities are practically limitless, because enameling steel can be so readily formed in shapes to meet any requirement—making this probably the most versatile facing material.

SIGN LETTERS—May be fabricated to special shapes or fired as a design on individual panels.

COLORS AND DESIGNS. Almost any color or shade can be produced by the porcelain enamel process. Combinations may be made on any panel, and designs, stripes, letters, symbols, or even pictorial treatment reproduced.

Twenty-five standard satin finish colors meet all ordinary requirements for attractive and harmonious combinations on the average job. These are in addition to black and white, in gloss finish. (Color card on request.)

FINISHES. The Kawneer Satin Finish (semi-matt, acid-resisting) is especially attractive, without excessive gloss, is acid-resisting and unaffected by atmospheric conditions. Where high lustre and reflectivity are desired, a gloss finish may be specified.

ERECTION. For best results Kawneer Architectural Porcelain Enamel Panels are installed on $\frac{3}{4}$ " x 2" steel furring strips (wood furring strips may be used). Furring Strips are fastened to wood with wood screws or to masonry with expansion plugs, spaced to accommodate the panels as ordered, and located plumb and level. Bronze Spring Clips are applied to metal furring with self-tapping screws at top and bottom of each panel. The bottom clips are applied first; then the panel is placed in position; then the top clips applied. Joints between panels ($\frac{1}{8}$ ") are then caulked.

REPLACEMENT. In the event of damage to any panel it may be removed without disturbing any of the surrounding panels—thanks to Kawneer individual suspension. Bottom clips are flattened with a screw driver, panel removed, and the new panel easily replaced.

PORCELAIN ENAMEL. Porcelain enameling as a fine art has been known for thousands of years and our museums display centuries-old work which retains all of its original life and color. Recent improvements have now made it possible to use this beautiful and durable material for architectural purposes, just as it has been used so successfully for household appliances.

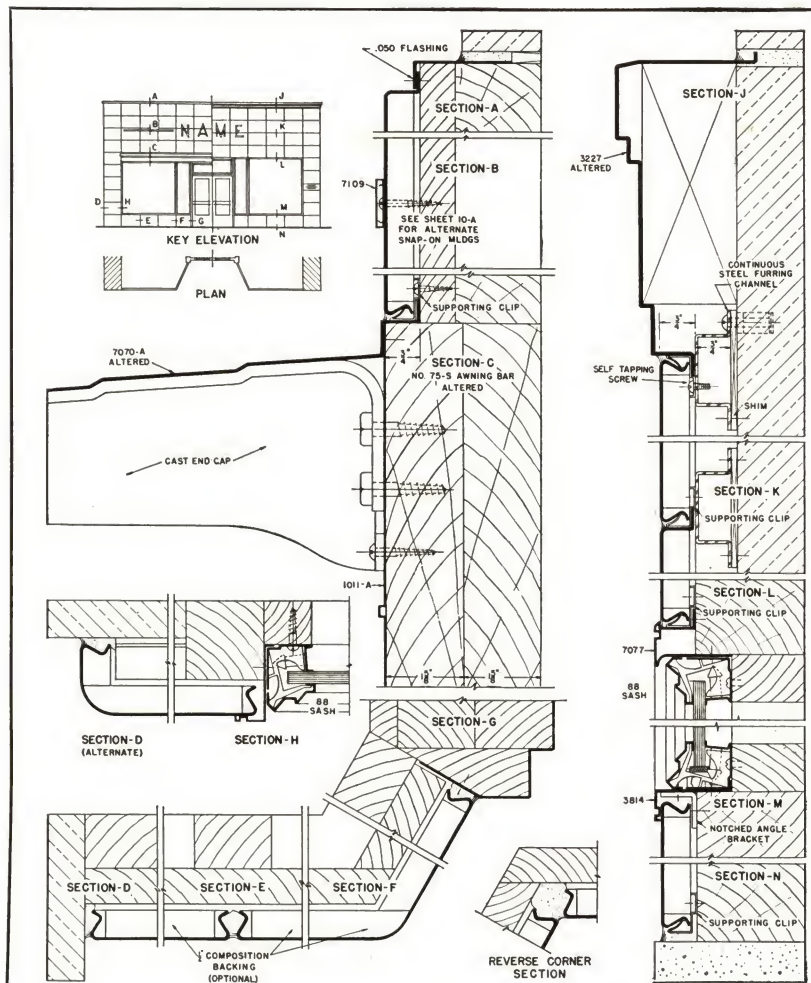
Porcelain enamel is inorganic, non-porous, changeless, all mineral; being composed entirely of silica, borax, zinc oxides and other mineral substances. The firing process completely fuses it with the metal base and the terrific heat completely destroys all organic substances. Do not confuse porcelain enamel with baked-enamel finishes, such as those used on automobiles. It is not an enamel, not a paint, not a lacquer, all of which contain organic, chiefly vegetable, matter which is subject to change. It is in reality glass, fused and made one with the metal base which has been formed to the desired shape—combining the permanence of glass with the strength and lightness of steel.

WRITE FOR COMPLETE INFORMATION

THE

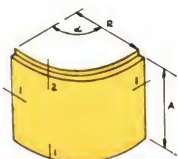
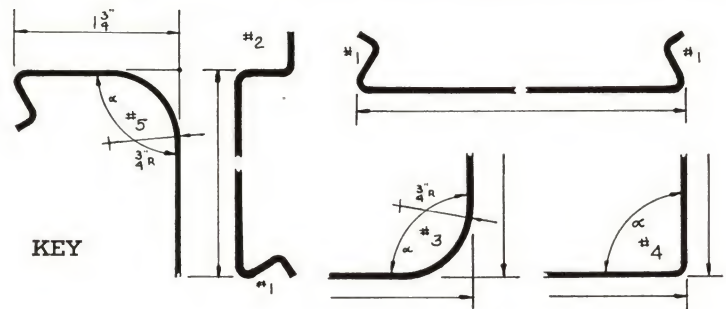
NILES **Kawneer** MICHIGAN
COMPANY

BRANCHES: New York, Chicago, Berkeley, Calif. Distributors in all principal cities.

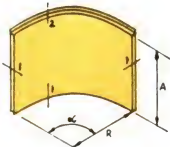


PATENTED AND PATENTS PENDING

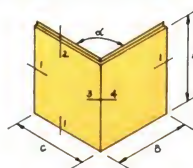
INSTALLATION DETAILS (3" SCALE)



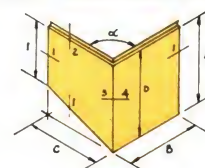
TYPE R-5



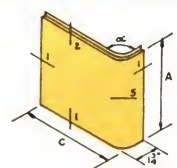
TYPE R-6



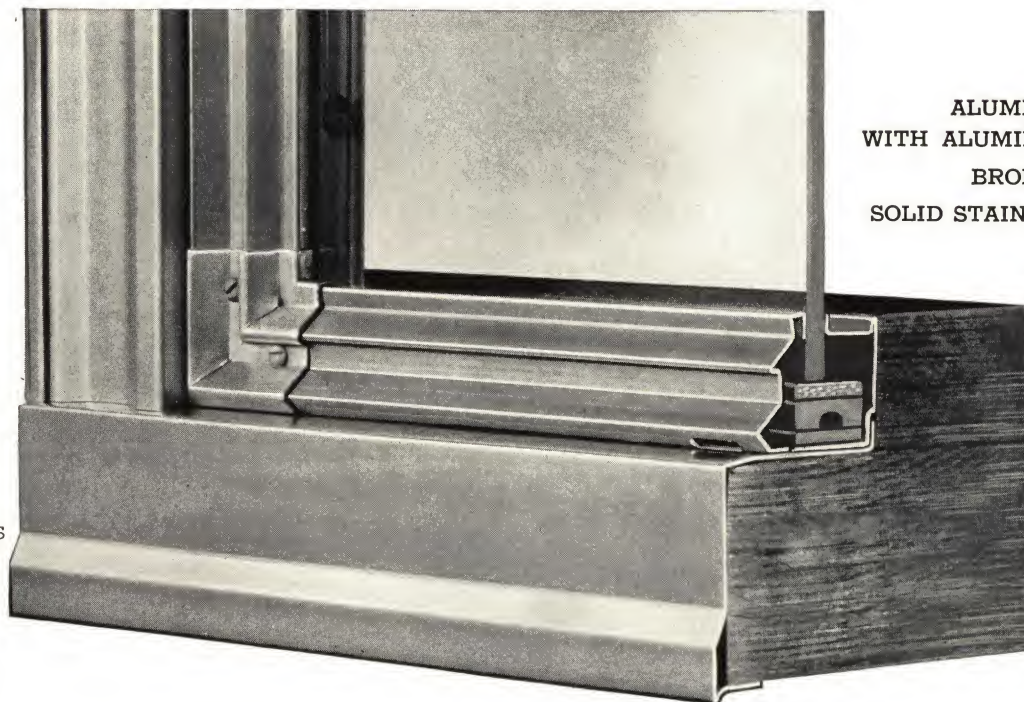
TYPE R-7



TYPE R-8



TYPE R-9
LEFT AND RIGHT RIGHT SHOWN

ROLLED STORE FRONT CONSTRUCTION

ALUMINUM
WITH ALUMILITE FINISH
BRONZE
SOLID STAINLESS STEEL

PATENTED
AND PATENTS
APPLIED FOR

COMPLETE, HARMONIOUSLY DESIGNED STORE FRONT CONSTRUCTION

Kawneer Store Fronts include all necessary metal construction (glass holding members, trim mouldings, glass-fired metal facing, doors, etc.) for the complete front. Kawneer construction is up-to-date, and efficiently designed to give lasting, trouble-free service. The superior **FULLY RESILIENT** construction (the basic Kawneer principle) allows for the inevitable movement of plate glass, yet holds it in a secure and powerful grip—regardless of variations in thickness of glass. Pressure is distributed evenly along the surface. Looseness and rattling are eliminated and the possibilities of glass breakage are reduced to an absolute minimum.

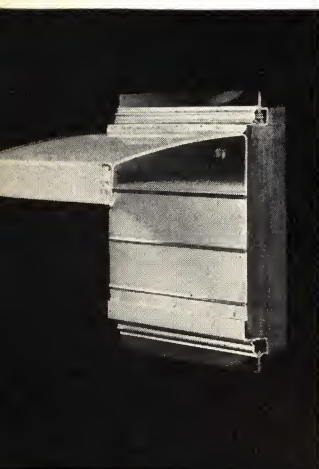
The simple, attractive Sash No. 88 holds glass by indirect screw pressure, applied from the back. Sash is perforated at intervals for drainage and face piece is provided with ventilation holes unless otherwise specified.

In addition to sash, the Kawneer line of rolled store front construction includes parts for every store front use—bars, awning bars, transom bars, mouldings, pilasters, sign letters, rustless metal doors, metal paneling, bulkheads, grilles, thresholds, showcase doors, ventilators, poster frames, cast ornaments and architectural metal work.

**SASH No. 88**

This construction is cold-rolled—straight and true—in suitable modern alloys of aluminum, bronze or solid stainless steel. The alumilite finish on aluminum hardens the surface—giving extra protection against atmosphere and abrasion, and imparting a unique and appealing gloss and color to the aluminum itself. Satin, polished, statuary or other practical finishes are also available for bronze—satin or polished for stainless steel.

COMPLETE FULL-SIZE DETAILS ARE AVAILABLE

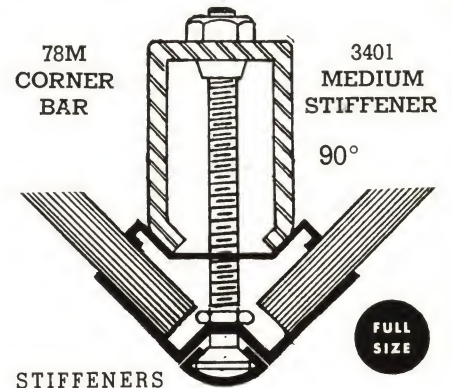
HOOD AWNING BAR**CONCEALED AWNING BAR****RECESSED AWNING BAR****TRANSOM BAR**

ROLLED STORE FRONT CONSTRUCTION

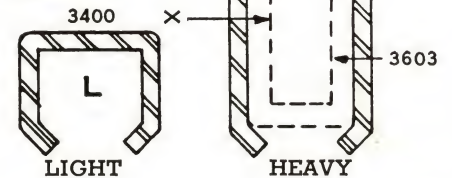
19
6

BARS AND STIFFENERS

Kawneer Bars should always be used to complete the framing of the show window, to minimize chances of glass breakage by providing full resiliency all around the plate glass, and to avoid the chance of injury to the passerby. Stock angles for rolled bars are shown in the gauge lines below, but these bars may be obtained at any angle desired.



STIFFENERS should be specified according to Table of Bars below. Reinforcement for Heavy Stiffeners supplied only when specified.



GAUGE LINES FOR OTHER ANGLES

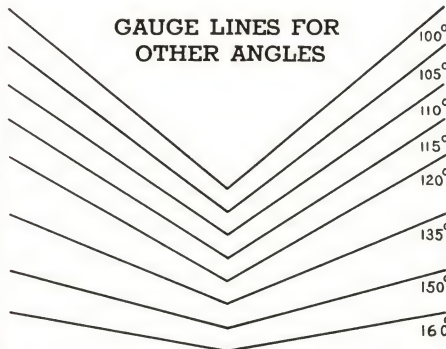


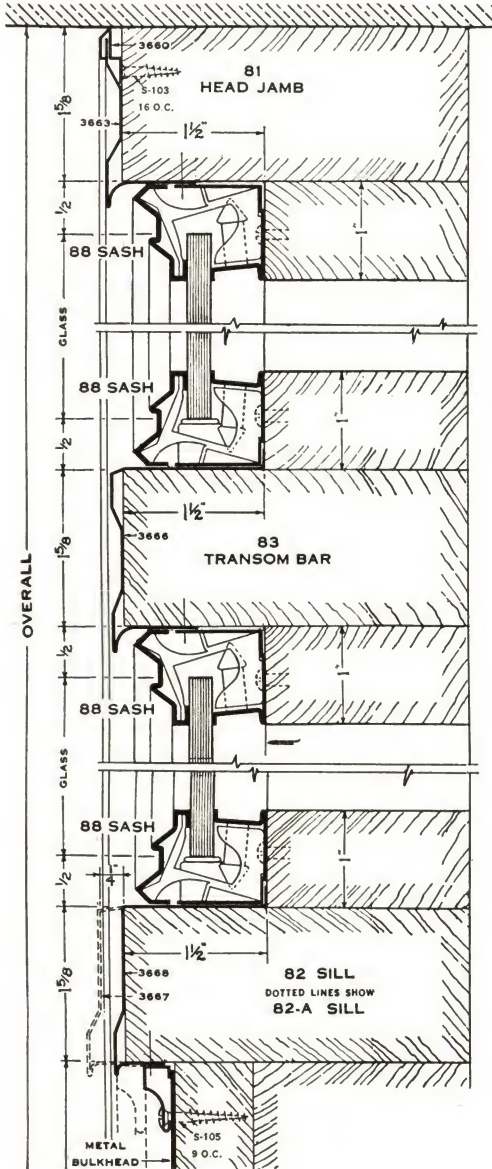
TABLE OF BARS

IN ORDER TO FACILITATE THE SELECTION OF PROPER BARS WE SUBMIT A TABLE WHICH WE BELIEVE WILL BE OF GREAT ASSISTANCE IN ORDERING. WE ARE ALSO SUBMITTING A FORMULA AS AN EXPLANATION OF THIS TABLE.

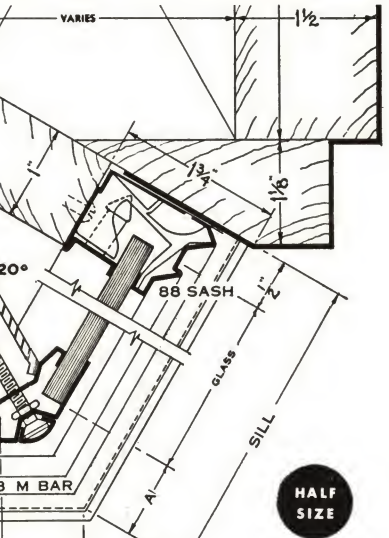
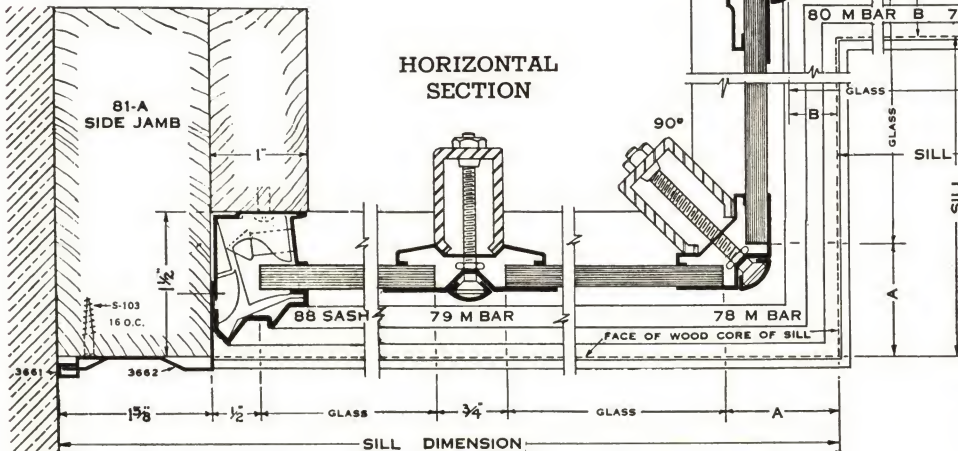
| STIFFENER | A | B | C |
|-----------|--------|-----------|----------|
| LIGHT | 60 In | 100 Sq Ft | 55 Sq Ft |
| MEDIUM | 78 In | 130 Sq Ft | 70 Sq Ft |
| HEAVY | 96 In | 140 Sq Ft | 72 Sq Ft |
| HEAVY-X | 108 In | 144 Sq Ft | 80 Sq Ft |

FORMULA—WE RECOMMEND ALL OF OUR BARS AS LISTED WHERE THE GLASS HEIGHT DOES NOT EXCEED THAT GIVEN IN COLUMN (A) AND THE COMBINED AREA OF THE 2 PLATES IS LESS THAN THE SQUARE FOOTAGE LISTED IN COLUMN (B). THE AREA OF 1 PLATE MUST NOT EXCEED THAT LISTED IN COLUMN (C).

VERTICAL SECTION



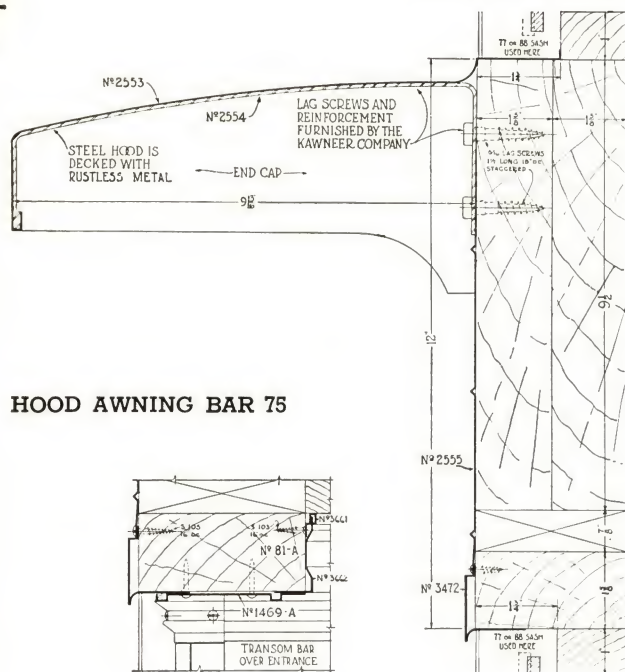
HORIZONTAL SECTION



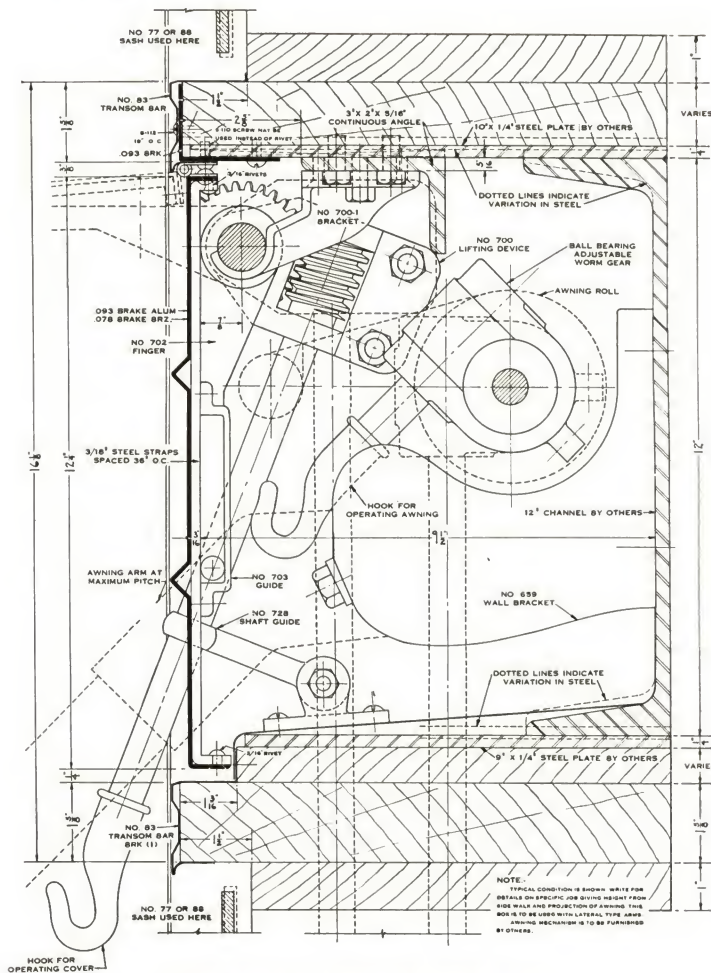
| Table Showing Dimension A | | Table Showing Dimension B | |
|---------------------------|-----------|---------------------------|---------|
| 90° | 1 1/8" + | 90° | 7/16" - |
| 100° | 1" + | 100° | 5/16" - |
| 105° | 15/16" + | 105° | 1/4" - |
| 110° | 7/8" + | 110° | 3/16" - |
| 120° | 13/16" + | 120° | 1/16" - |
| 130° | 1 1/16" + | 130° | 0" - |
| 135° | 5/8" + | 135° | 1/16" + |
| 150° | 9/16" + | 150° | 3/16" + |

$$\frac{19}{6}$$

ROLLED STORE FRONT CONSTRUCTION

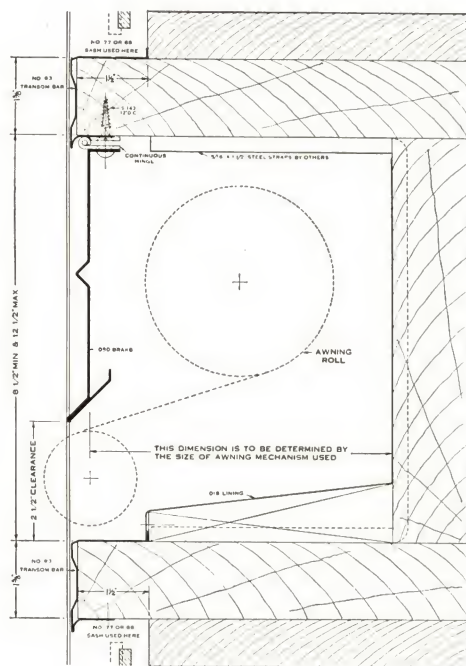


HOOD AWNING BAR 75

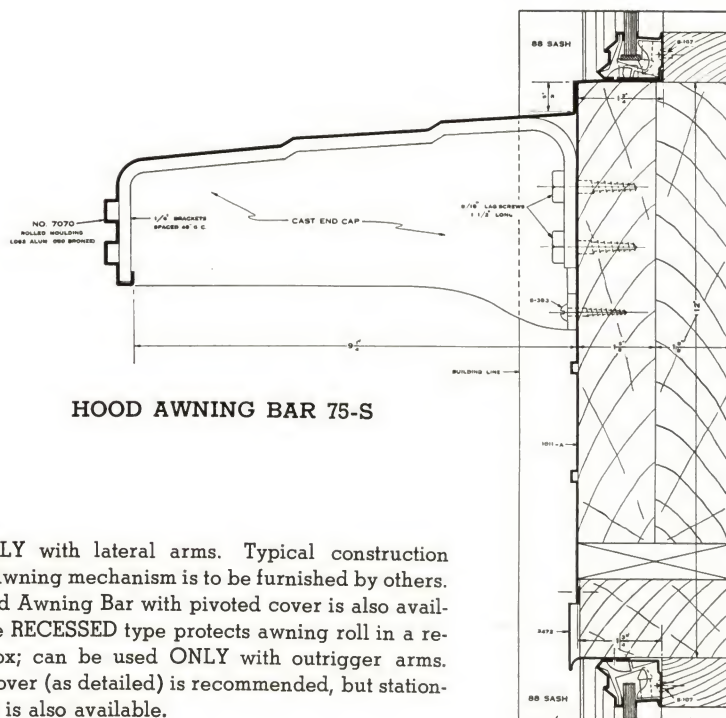


CONCEALED AWNING BAR 32-H

**QUARTER
SIZE**



RECESSED AWNING BAR 35



HOOD AWNING BAR 75-S

AWNING BARS

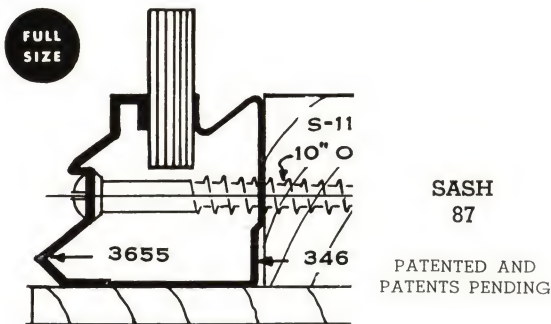
The four types of Kawneer Awning Bars detailed on this page are very attractive and practical for any style of store front.

The HOOD types are simple in design, easily installed, and give dependable protection — may be used with lateral or outrigger arms. The CONCEALED type hides and protects the awning roll when not in use; can be

used **ONLY** with lateral arms. Typical construction shown. Awning mechanism is to be furnished by others. Concealed Awning Bar with pivoted cover is also available. The **RECESSED** type protects awning roll in a recessed box; can be used **ONLY** with outrigger arms. Hinged cover (as detailed) is recommended, but stationary cover is also available.

ROLLED STORE FRONT CONSTRUCTION

19
6



SASH
87

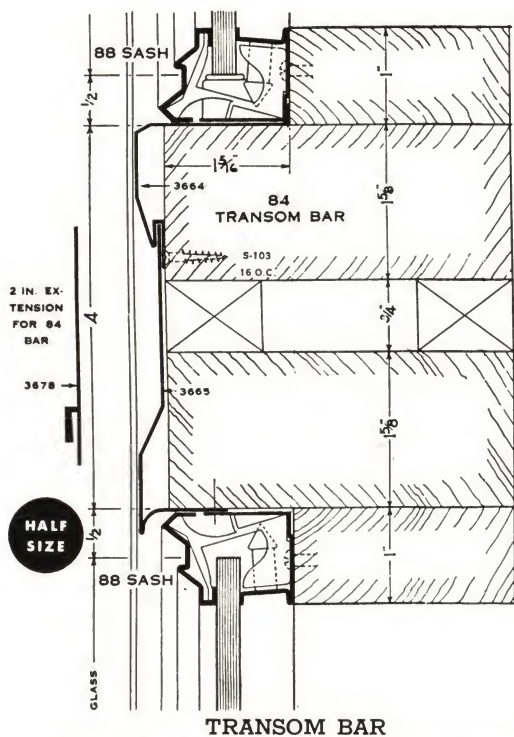
PATENTED AND
PATENTS PENDING

The Kawneer Sash No. 87 presents a very neat appearance for the average store front. It is a simple, screw-pressure type of cold-rolled sash—the principle of which has been proved by 34 years of general use. Fully RESILIENT members are fabricated from proper alloys of aluminum, bronze or stainless steel in any practical finish. Very similar in appearance to the No. 88 Sash.



SIGNS • SPECIAL METAL WORK

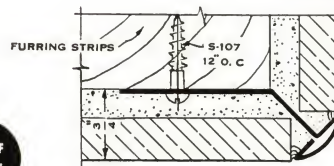
Several types of metal signs are available—fabricated to the architect's specifications. Illustrated above is the ribbon type, mounted on black porcelain enamel. In addition to the material detailed in this catalog, Kawneer furnishes many other mouldings and shapes, and fabricates all types of special metal work to order.



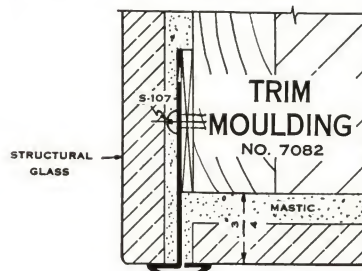
Note Extension Moulding No. 3678 for wider bars.

HALF
SIZE

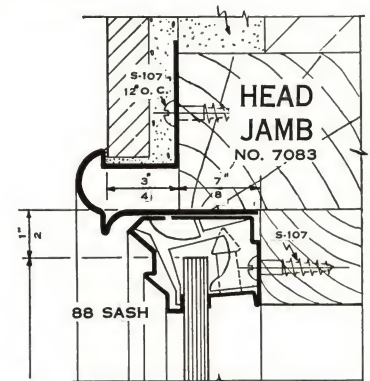
TRIM MOULDINGS



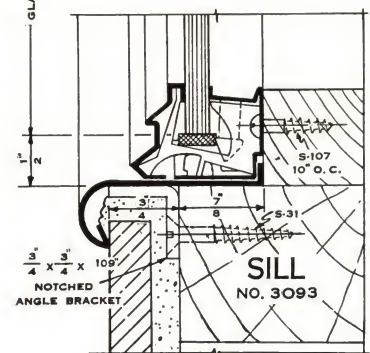
CORNER TRIM
NO. 7082-B



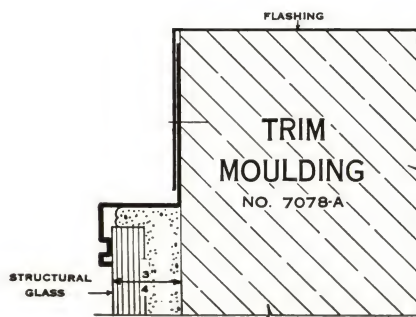
TRIM
MOULDING
NO. 7082-A



HEAD
JAMB
NO. 7083

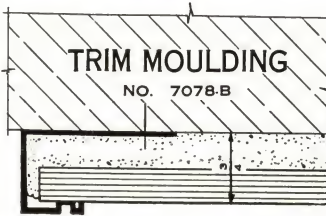


SILL
NO. 3093

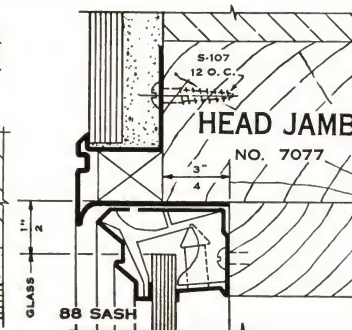


TRIM
MOULDING
NO. 7078-A

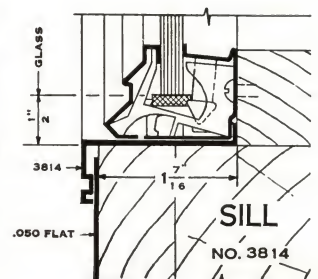
Furnished in aluminum with
Alumilite Finish, Satin Finish
Bronze or Stainless Steel.



TRIM MOULDING
NO. 7078-B

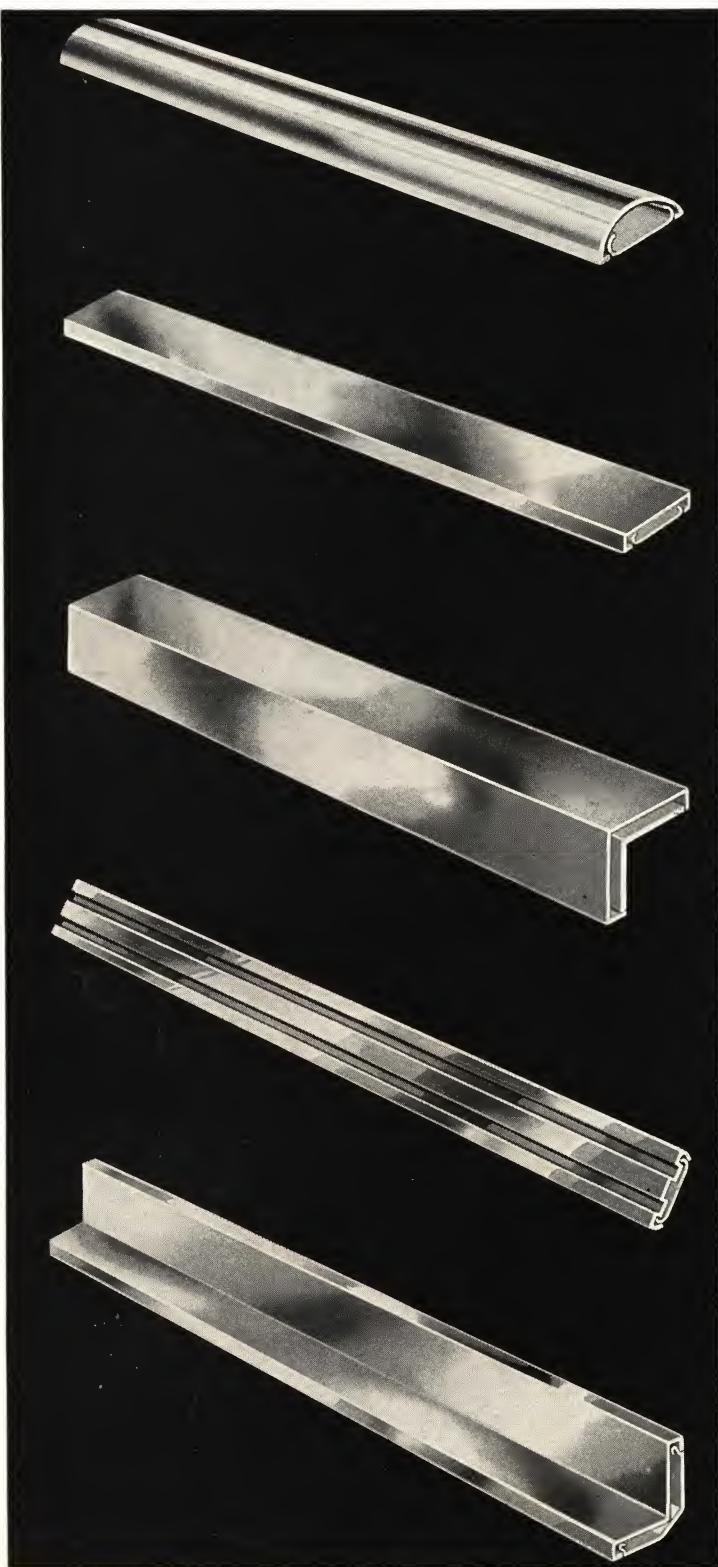


HEAD JAMB
NO. 7077



SILL
NO. 3814

19
6



SNAP-ON MOULDINGS

In tune with the trend of modern design, Kawneer Snap-On Mouldings offer unusual possibilities for distinctive and practical trim. The attractive appearance of these Mouldings is further improved by the Snap-On feature which conceals all nails or screws and presents straight, unbroken lines that are so effective in modern decoration. Kawneer Snap-On Mouldings are available in either aluminum, bronze or stainless steel—with galvanized steel core. The illustrations shown at the left are only a few of the most popular. Full size details shown below.



No. 7125



No. 7022



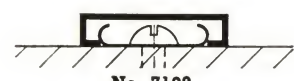
No. 7063



No. 7107



No. 7093



No. 7108



No. 7095



No. 7109



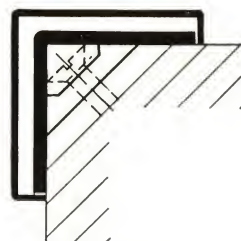
No. 7097



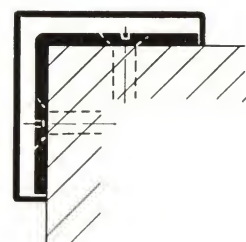
No. 7099



No. 7110



No. 7105-A



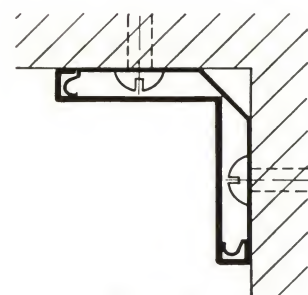
No. 7105



No. 7101



No. 3710

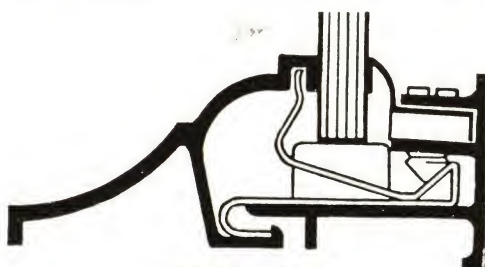


No. 7103

RESILIENT EXTRUDED STORE FRONT CONSTRUCTION

ALUMINUM WITH ALUMILITE FINISH

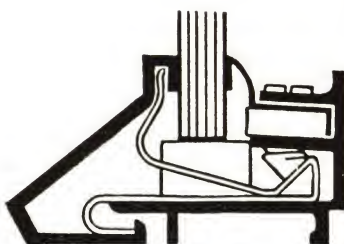
BRONZE WITH POLISHED, SATIN OR STATUARY FINISH



SASH A-1-K

Use Sills A-5-Z, A-5, A-50

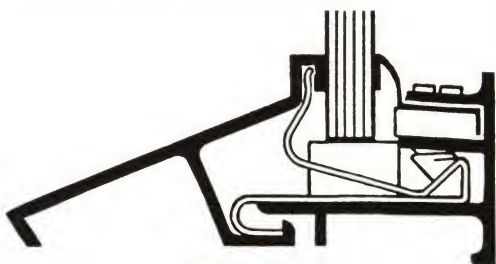
FULL
SIZE



SASH A-1-Y

Use Sills A-5-Z, A-5, A-50

PATENTED AND PATENTS PENDING



SASH A-1-X

Use Sills A-5-Z, A-5, A-50

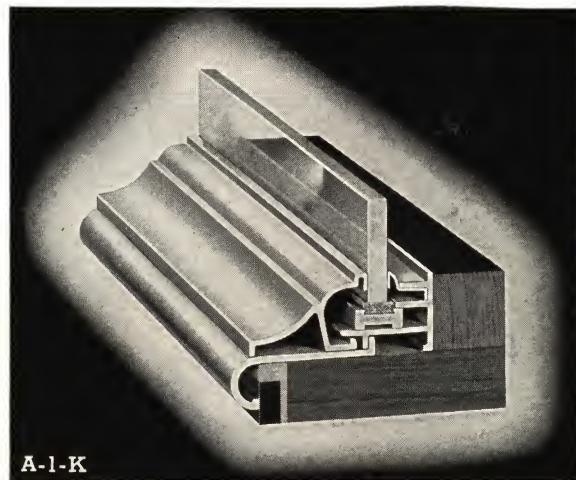
The famous Kawneer RESILIENT Extruded Store Front Construction is now available in either aluminum with the Alumilite Finish or architectural Bronze—with a choice of attractive face pieces. Note that variety and richness are achieved with sash that are simple and unobtrusive—honestly designed to hold and protect the plate glass and to frame the display window.

For those who prefer the heavy extruded construction, these RESILIENT Extruded Sash provide truly safe and dependable glass setting. Although extruded shapes are, by their very nature, rigid and unyielding, the introduction of fully resilient Spring Mechanism at front and continuous Spring at back, creates an element of flexibility which prevents glass breakage.

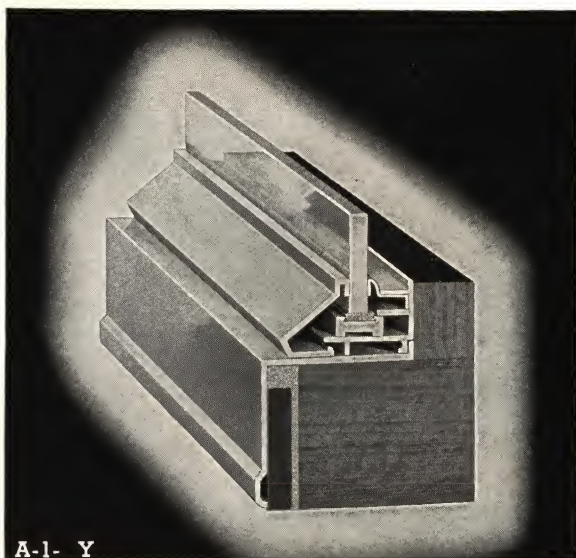
This resiliency allows for the inevitable movement of plate glass and framing, yet maintains a firm, secure grip at all times—equally distributed along the surface and equally effective on glass varying in thickness from $\frac{3}{16}$ " to $\frac{5}{16}$ ". No looseness. No binding. No rigidity.

Sash can be mitered perfectly, but corner caps are furnished. Drainage and ventilation holes are made in sash only when specified. Sash is self-supporting.

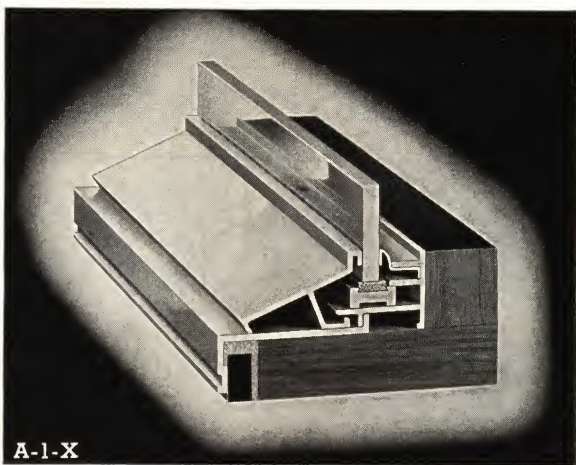
The complete line of Kawneer Extruded Store Front Construction is harmoniously designed in simple, striking lines, and includes attractive shapes for every store front purpose. An ideal construction to use where richness, lasting beauty and dependable glass protection are desired.



A-1-K

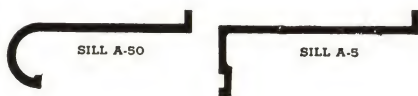


A-1-Y



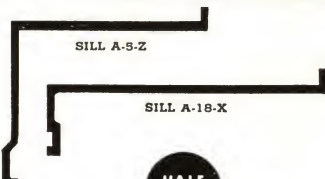
A-1-X

ALTERNATE SASH AND SILLS



SILL A-50

SILL A-5



SILL A-5-Z

SILL A-18-X

HALF
SIZE



SASH A-1-BK



SASH A-1-AK
USE SILLS
A-18-X



SASH A-1-BX

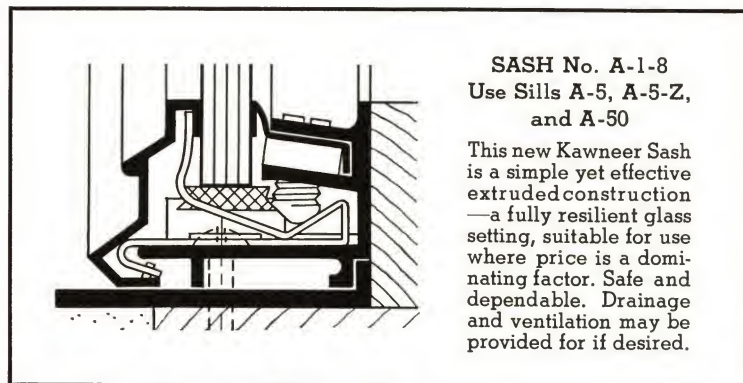
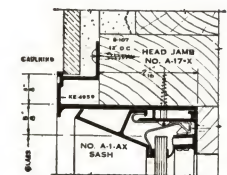


SASH A-1-AX
USE SILLS
A-18-X


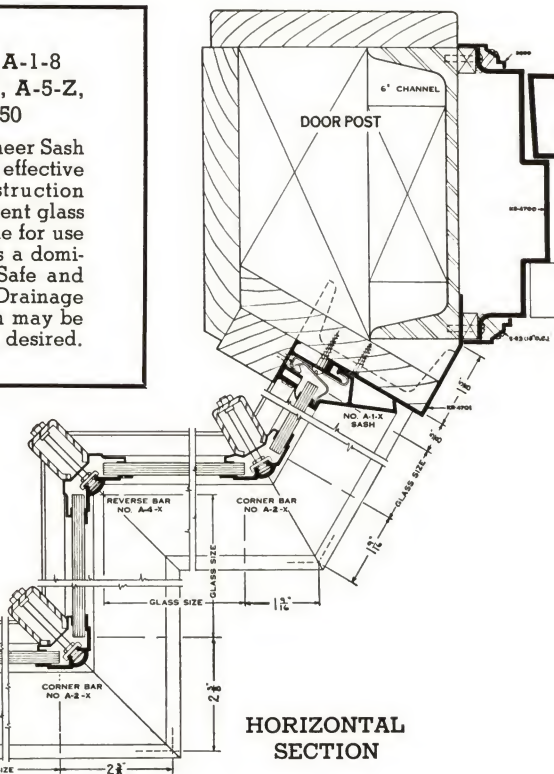
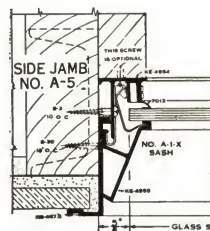


SASH A-1-BY

6




**QUARTER
SIZE**



No. B COLD ROLLED. Bronze. 4" x 1 1/2"

No. B COLD ROLLED. Bronze. 4" x 1/2"




No. 4. EXTRUDED
Bronze. $2\frac{1}{4}" \times \frac{1}{4}"$

No. 4. EXTRUDED
Bronze. $2\frac{1}{4}"$ x $\frac{1}{4}"$


No. 5 EXTRUDED.
Bronze. 3" x $\frac{5}{16}$ "

No. 5 EXTRUDED.
Bronze. 3" x $\frac{5}{16}$ "



No. 6 EXTRUDED. Bronze. 4" x $\frac{5}{16}$ "

No. 6 EXTRUDED. Bronze. 4" x 5 5/16"



No. 7 EXTRUDED. Bronze. 5" x 7 1/8"

No. 8 EXTRUDED.
Bronze. Furnished with weathering
angle. $1\frac{3}{4}" \times \frac{3}{8}"$

No. 9 EXTRUDED.
Bronze. Furnished with weathering
angle. $2\frac{1}{4}" \times 3\frac{3}{8}"$

No. 10 **EXTRUDED.** Aluminum only. 4" x 5¹⁶/₁₆"

No. 11 **EXTRUDED.** Aluminum only. 5" x 7/16"



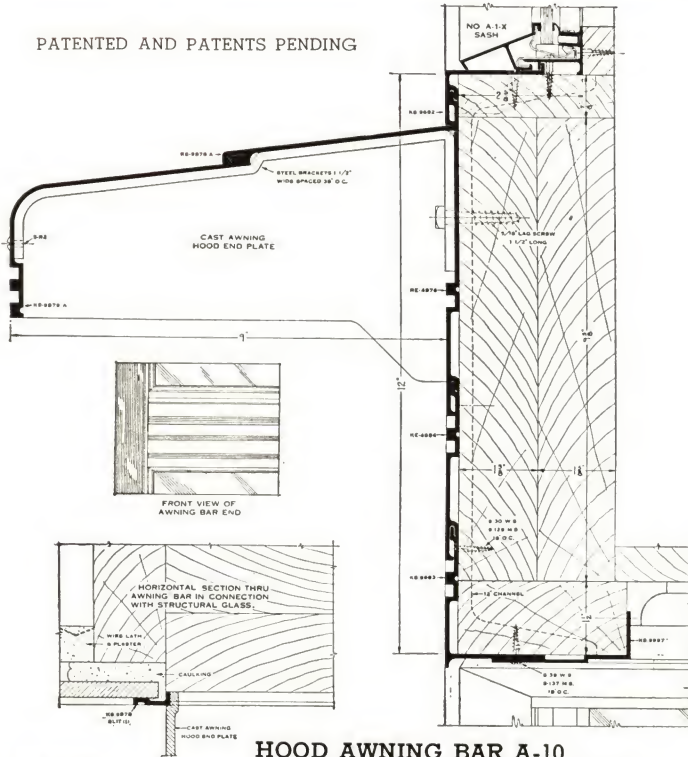
No. 12 **EXTRUDED.** Aluminum only. $4\frac{5}{8}" \times 5\frac{5}{8}"$

**HALF
SIZE**

EXTRUDED STORE FRONT CONSTRUCTION

19
6

PATENTED AND PATENTS PENDING

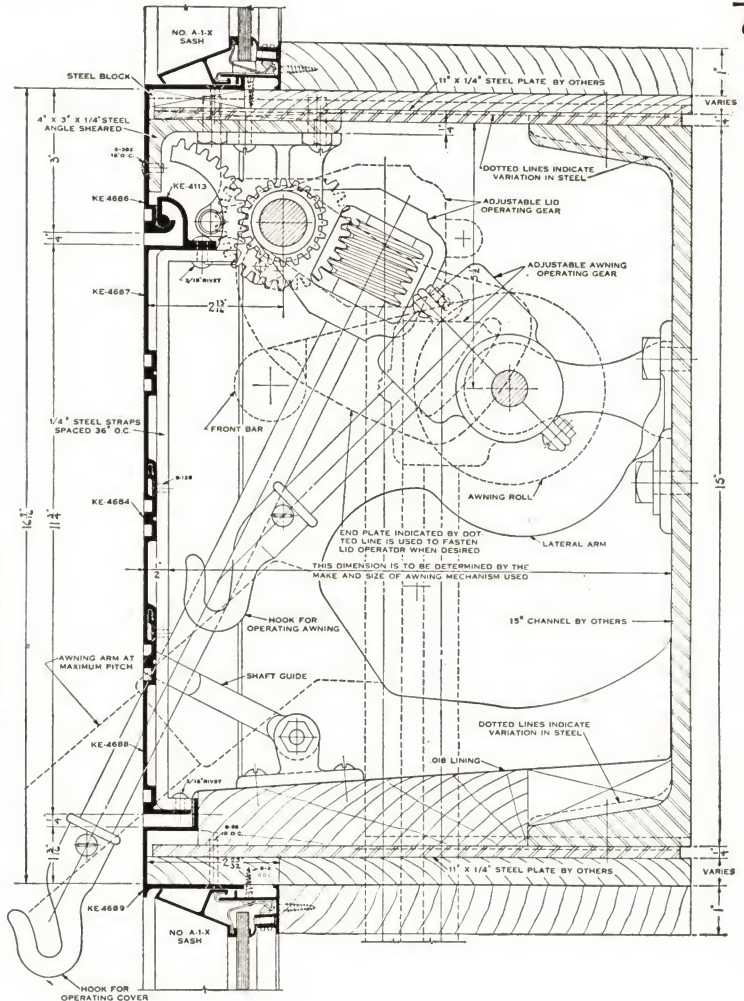


HOOD AWNING BAR A-10

An exceptionally graceful awning bar, which may be used with either lateral or outrigger arms. Steel channel shown by dotted lines is optional. (Furnished by others.)

CONCEALED AWNING BAR A-11-H

Awning roll is protected and completely hidden when not in use — a very desirable condition. For use with lateral arms ONLY. Awning mechanism by others. Pivoted type also available.



AWNING BARS

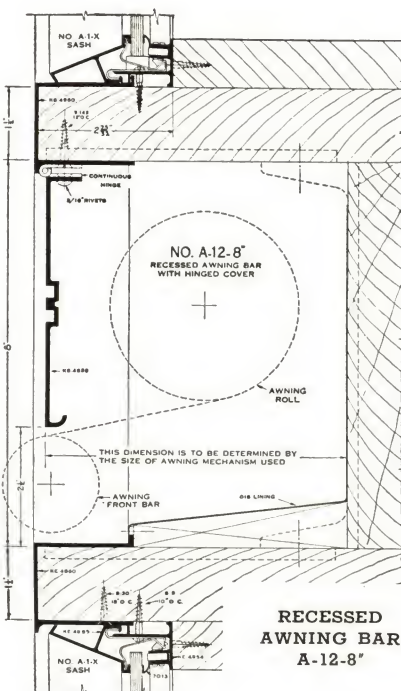
These very attractive awning bars become a valuable decorative feature of the store front design. In addition to contributing interesting highlights and shadow lines, they completely or partially hide unsightly awning rolls when not in use.

RECESSED AWNING BAR A-12-8"

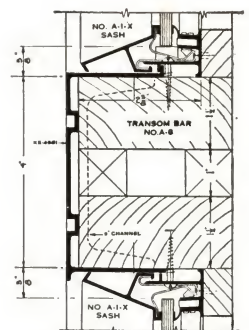
Shown at the left, protects awning roll in recessed box. For outrigger arms only. Available also with stationary cover and in 12" size.

TRANSOM BARS

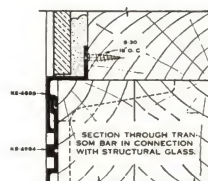
Transom Bar No. A-9-3", detailed at right, can be extended to 6", 9", and 12" by use of Extension Moulding KE-4684, shown below. 1 1/2" Bar A-7 is shown with Vertical Section on Page 10. 4" Bar No. A-8, shown at right above, is similar in appearance to the A-9 series, but one shape only is used.



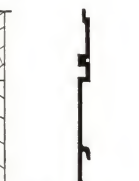
**RECESSED
AWNING BAR
A-12-8"**



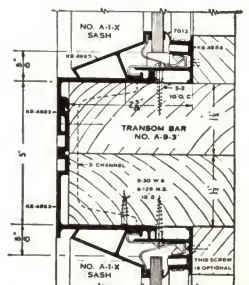
TRANSOM BAR A-8"



**USE WITH
STRUCTURAL
GLASS**



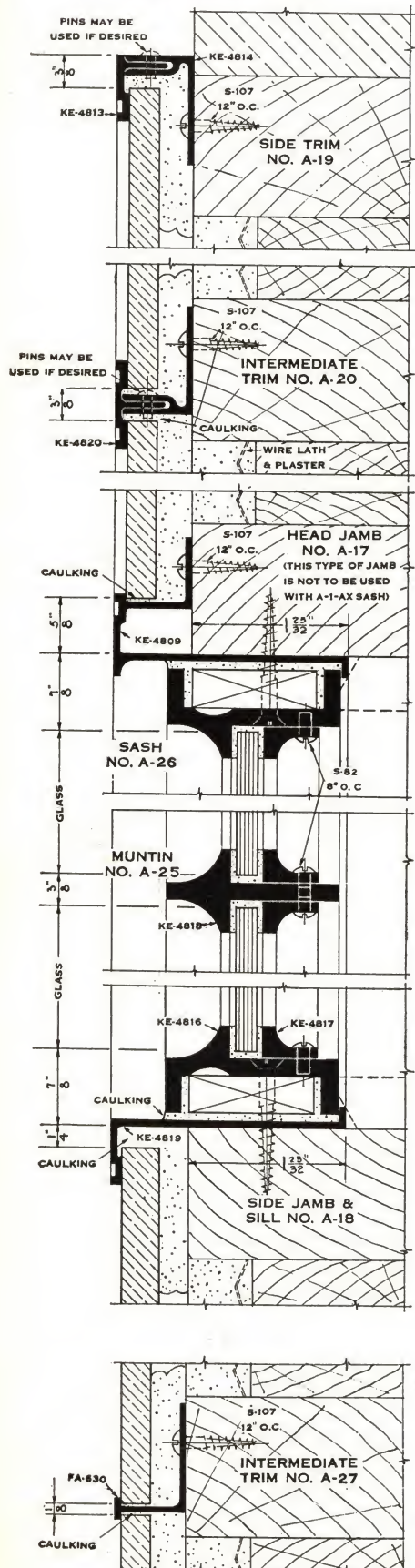
**EXTENSION
MOULDING
KE-4684**



TRANSOM BAR A-9-3"

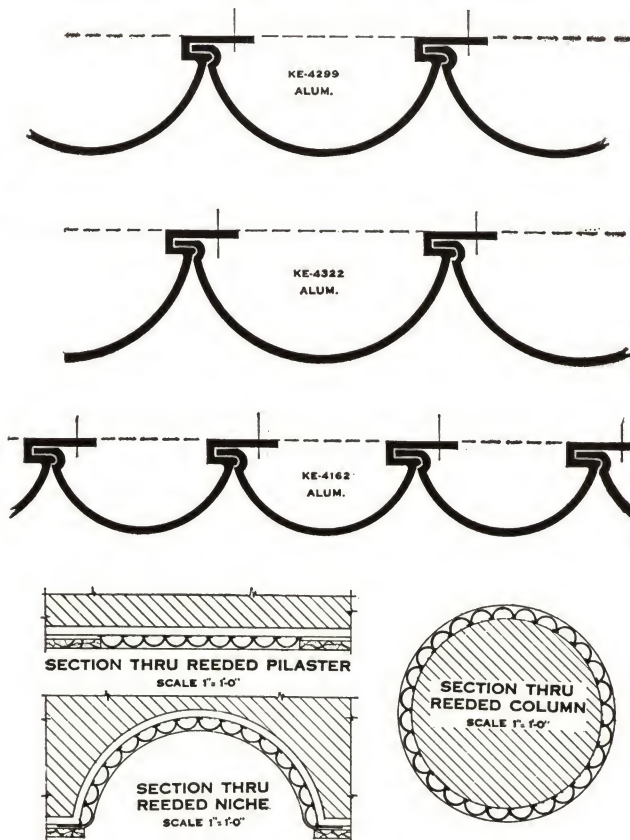
EXTRUDED STORE FRONT CONSTRUCTION

TRIM MOULDINGS



REED MOULDINGS

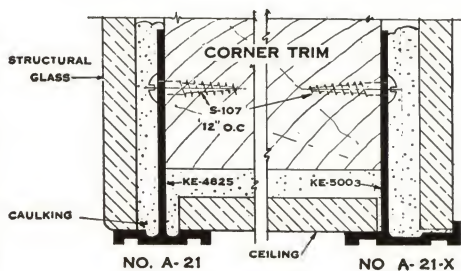
HALF SIZE



OTHER PRODUCTS

★ Kawneer manufactures other store front members including HINGED and PIVOTED VENTILATORS, CAST ENRICHMENTS, METAL PANELING, SHOW CASE DOORS, ADDITIONAL SILL, JAMB AND TRIM MOULDINGS for use with Porcelain Enamel Panels, Glass Block, Structural Glass, etc. Write for f. s. details.

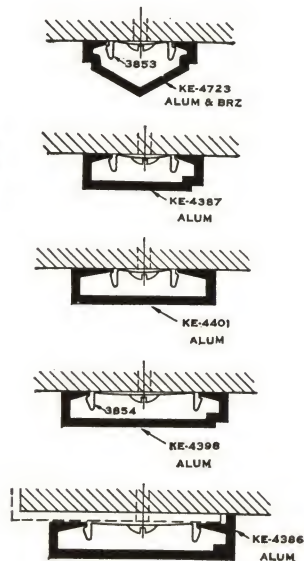
See separate catalog in Sweet's for complete information on SEALAIR (All-aluminum) WINDOWS, aluminum and bronze DOORS AND ENTRANCES, and ARCHITECTURAL METAL WORK.



SNAP-ON MOULDINGS

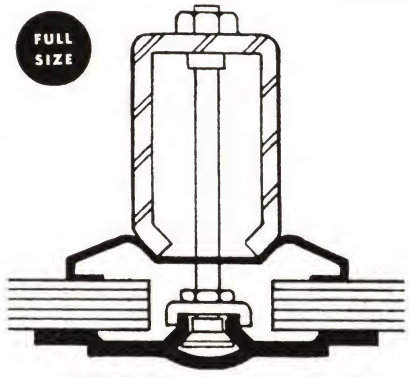
Kawneer Snap-On Mouldings are very valuable for a wide variety of uses—both interior and exterior. Extruded Snap-On Mouldings in aluminum only. (See also Page 8.)

HALF SIZE



EXTRUDED STORE FRONT CONSTRUCTION

19
6

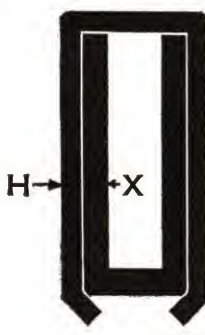


FULL SIZE

DIVISION BAR No. A-3-X


EXTRUDED BARS

HX




H → X

H




STIFFENERS

M



STIFFENERS

EX



STIFFENERS

TABLE OF BARS

IN ORDER TO FACILITATE THE SELECTION OF PROPER BARS, WE SUBMIT A TABLE WHICH WE BELIEVE WILL BE OF GREAT ASSISTANCE IN ORDERING. WE ARE ALSO SUBMITTING A FORMULA AS AN EXPLANATION OF THIS TABLE.

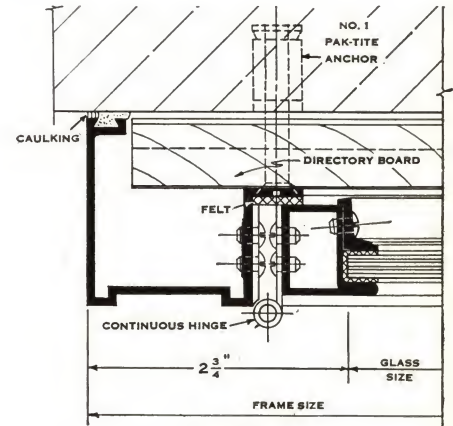
| BAR | STEEL | | | ALUMINUM AND BRONZE | | | |
|---------|-------|-----|----|---------------------|----|-----|----|
| | A | B | C | BAR | A | B | C |
| LIGHT | 60 | 100 | 55 | M | 60 | 100 | 55 |
| MEDIUM | 78 | 130 | 70 | H | 72 | 130 | 70 |
| HEAVY | 96 | 140 | 72 | EX | 78 | 135 | 75 |
| HEAVY-X | 108 | 144 | 80 | HX | 84 | 140 | 80 |

FORMULA: WE RECOMMEND ALL OF OUR BARS AS LISTED. WHERE THE GLASS HEIGHT DOES NOT EXCEED THAT GIVEN IN COLUMN (A), AND THE COMBINED AREA OF THE 2 PLATES IS LESS THAN THE SQUARE FOOTAGE LISTED IN COLUMN (B), THE AREA OF 1 PLATE MUST NOT EXCEED THAT LISTED IN COLUMN (C).

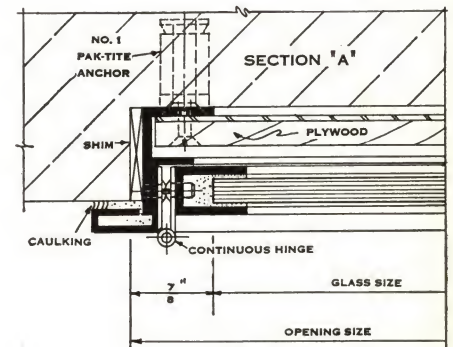
Extruded Bars are carried in all these angles: 90°, 110°, 120°, 135°, and 160°—both Corner and Reverse. However, they may be obtained to order at any angle. Details above show HX, Heavy Stiffener (H) with reinforcement (X)—included only when specified; H, Heavy Stiffener alone; M, Medium Stiffener; EX, Extra Heavy Stiffener.

POSTER FRAMES

Poster and Bulletin Board Frames are produced in aluminum or bronze, for use in theatre lobbies, and in connection with store fronts as unit display cases. Four types are made, two of which are shown here.



TYPE - 1



TYPE - 2



At left is a very attractive example of a Kawneer Door installation in a Kawneer Porcelain Enamel Store Front at Fort Dodge, Iowa.

RUSTLESS METAL DOORS

One of the most significant of recent store developments is the rapidly increasing use of Kawneer Rustless Metal Doors and Entrances as an integral part of the store front design. These doors are precisely and sturdily built—easy to maintain—will not rust, swell, shrink, warp, rot out or sag—and never need painting. They also add much to the appearance of the building. Refer to catalog on Kawneer Windows, Doors and Metal Work, also in SWEET'S—or write for complete new booklet.



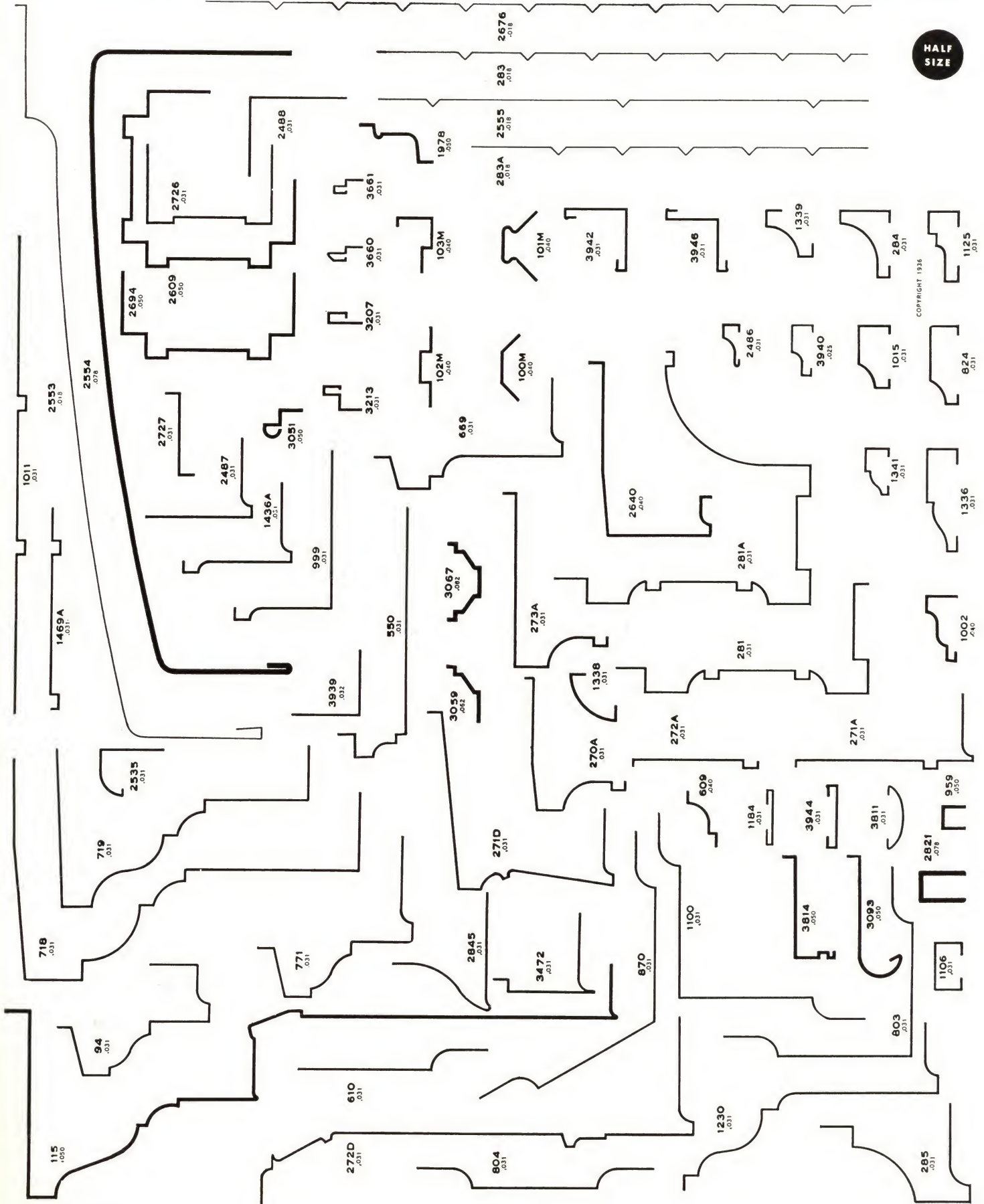
Illustration at right shows a smart, modern bronze door for a New York store. Ben Schlanger, Architect.

COLD ROLLED ALUMINUM

STOCK MOULDINGS

BRONZE, OR STAINLESS STEEL

HALF
SIZE

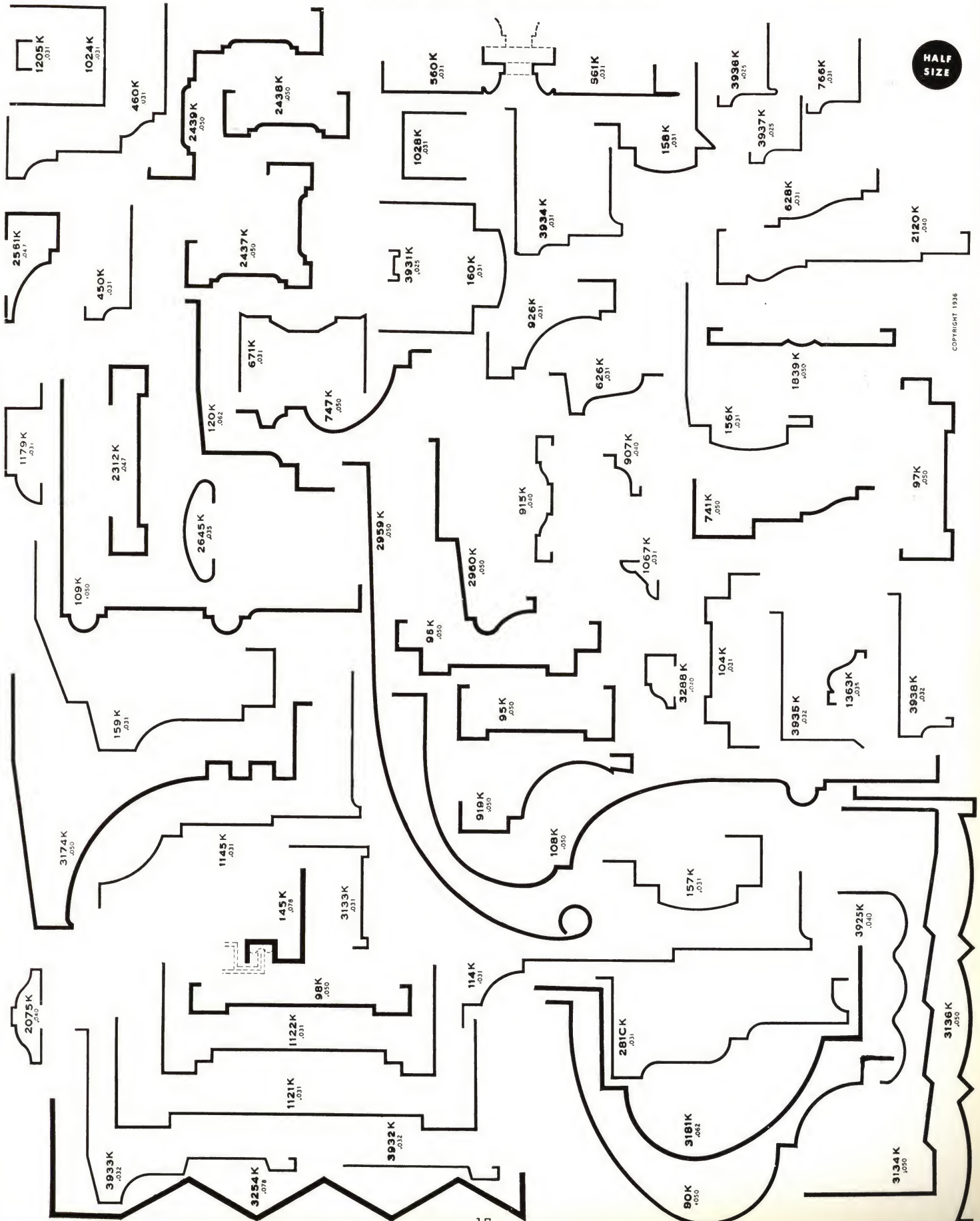


COPYRIGHT 1936

SPECIAL SET-UP

NON-STOCK MOULDINGS

REQUIRED



HALF SIZE

COPYRIGHT 1916

Kawneer

STORE FRONTS

1939